

Please insert the substitute Sequence Listing information (copy enclosed) after the last page of the Substitute Specification (page 15) to replace the original Sequence Listing contained in the Substitute Specification. *re*

In the Drawings:

In accordance with 37 C.F.R. § 1.121(d), proposed changes to Figures 1 and 2 are marked in red for approval by the Examiner on copies of the figures submitted herewith.

In the Claims:

Please cancel claims 1-17 without prejudice or disclaimer of the subject matter contained therein. Please add new claims 18-50 listed below. This list represents all of the claims that will be presently pending.

Pending Claims

- Full 19/20*
18. (New) A particle comprising:
- (a) a protein envelope with a fusion protein, the fusion protein comprising a virus protein, a cell permeability-mediating peptide, and a heterologous cell-specific binding site; and
 - (b) nucleic acid sequences present in the protein envelope, each of the nucleic acid sequences comprising a sequence encoding a virus-specific packaging signal and a sequence encoding a structural gene.
- 20/* 19. (New) The particle of claim *19*, wherein the virus protein is derived from the group consisting of adenovirus, adeno-associated virus, vaccinia virus, baculovirus and hepadnavirus.
- 20/* 20. (New) The particle of claim *19*, wherein the hepadnavirus is a hepatitis B virus.

21. (New) The particle of claim 18, wherein the virus protein is a surface protein.
22. (New) The particle of claim 22, wherein the surface protein is an LHBs.
23. (New) The particle of claim 18, wherein the virus protein is a core protein.
24. (New) The particle of claim 23, wherein the core protein is an HBcAg.
25. (New) The particle of claim 18, wherein the cell permeability-mediating peptide comprises the amino acid sequence set forth in SEQ ID NO:20.
26. (New) The particle of claim 18, wherein the heterologous cell-specific binding site is RGD.
27. (New) The particle of claim 18, wherein the fusion protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.
28. (New) The particle of claim 18, wherein the fusion protein comprises the amino acid sequence set forth in SEQ ID NO:1.
29. (New) The particle of claim 18, wherein the fusion protein has the amino acid sequence set forth in SEQ ID NO:1.
30. (New) The particle of claim 18, wherein the fusion protein comprises the amino acid sequence set forth in SEQ ID NO:2.
31. (New) The particle of claim 18, wherein the fusion protein has the amino acid sequence set forth in SEQ ID NO:2.
32. (New) A method for the preparation of the particle according to claim 18, wherein the fusion protein contains an LHBs and a heterologous cell-specific binding site, the method comprising:

(a) cotransfecting cells containing a hepatitis B virus genome, wherein the cells do not express LHBs, with a first expression vector coding for a fusion protein, the fusion protein comprising an LHBs and a heterologous cell-specific binding site, and with a second expression vector comprising a virus-specific packaging signal and a structural gene; and

(b) isolating and purifying the particle.

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and
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33. (New) A method for the preparation of the particle according to claim *18*, wherein the fusion protein comprises an HBcAg, a cell permeability-mediating peptide and a heterologous cell-specific binding site, the method comprising:

(a) cotransfecting cells containing an HBV polymerase with a first expression vector coding for a fusion protein, the fusion protein comprising an HBcAg, a cell permeability-mediating peptide and a heterologous cell-specific binding site, and with a second expression vector comprising a virus-specific packaging signal and a structural gene, and

(b) isolating and purifying the particle.

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34. (New) A fusion protein comprising a virus protein, a cell permeability-mediating peptide and a heterologous cell-specific binding site.

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35. (New) The fusion protein of claim *34*, comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

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36. (New) The fusion protein of claim *34*, comprising the amino acid sequence set forth in SEQ ID NO:1.

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37. (New) The fusion protein of claim *34*, comprising the amino acid sequence set forth in SEQ ID NO:2

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38. (New) The fusion protein of claim 35, wherein the amino acid sequence differs from that set forth in SEQ ID NO:1 or SEQ ID NO:2 by one amino acid.

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39. (New) The fusion protein of claim 35, wherein the amino acid sequence differs from that set forth in SEQ ID NO:1 or SEQ ID NO:2 by up to 10%.

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40. (New) The fusion protein of claim 35, wherein the amino acid sequence differs from that set forth in SEQ ID NO:1 or SEQ ID NO:2 by up to 20%.

42/
41. (New) A DNA encoding the fusion protein of claim 34.

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42. (New) A DNA encoding the fusion protein of claim 35, the DNA comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:3 and SEQ ID NO:4.

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43. (New) A DNA encoding the fusion protein of claim 35, the DNA comprising the nucleotide sequence set forth in SEQ ID NO:3.

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44. (New) A DNA encoding the fusion protein of claim 35, the DNA comprising the nucleotide sequence set forth in SEQ ID NO:4.

46/
45. (New) The DNA of claim 42, wherein the nucleotide sequence differs from that set forth in SEQ ID NO:3 or SEQ ID NO:4 by one base pair.

47/
46. (New) The DNA of claim 42, wherein the nucleotide sequence differs from that set forth in SEQ ID NO:3 or SEQ ID NO:4 by up to 10%.

48/
47. (New) The DNA of claim 42, wherein the nucleotide sequence differs from that set forth in SEQ ID NO:3 or SEQ ID NO:4 by up to 20%.

49/
48. (New) A DNA encoding the fusion protein of claim 35, wherein the DNA has the nucleotide sequence set forth in SEQ ID NO:3.

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49. (New) A DNA encoding the fusion protein of claim 35, wherein the DNA has the nucleotide sequence set forth in SEQ ID NO:4.